ESSAY. Write your answer in the space provided or on a separate sheet of paper.

10) By using the appropriate molecular formulas, write a balanced equation which describes the complete combustion of nonane.

11) View a butane molecule along the C_2—C_3 bond and provide a Newman projection of the lowest energy conformer.

12) Use a sawhorse structure to depict the eclipsed conformer of ethane.

13) Provide a representation of the gauche conformer of butane.

14) Describe the source of angle strain and torsional strain present in cyclopropane.

15) Draw the most stable conformation of *trans*-1,2-dimethylcyclohexane.

16) Draw the chair conformer of cyclohexane. Label the axial hydrogens (H_a) and the equatorial hydrogens (H_e).

17) Draw the most stable conformation of *trans*-1-*tert*-butyl-3-ethylcyclohexane.

18) Provide an acceptable name for the compound below.